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Date: May 3, 2005 Name: Raymond W. Green

Signature:

BRINKS
HOFER
GILSON
& LIONE

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Appln. of: Daniel J. Mattson et al.

Appln. No.: 09/558,386

Filed: April 25, 2000

For: SYSTEM FOR DETECTING AND
RELEASING A PERSON LOCKED IN
THE TRUNK OF A VEHICLE

Examiner: Davetta Woods Goins

Art Unit: 2632

Attorney Docket No: 285/502

Mail Stop Amendment
Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

TRANSMITTAL

Sir:

Attached is/are:

- ☒ INFORMATION DISCLOSURE STATEMENT (7 pages) with attachments (15 pages)
- ☒ Return Receipt Postcard

Fee calculation:

- ☐ A fee in the amount of \$_____ for submitting an Information Disclosure Statement under 37 C.F.R. 1.17(p).
- ☐ Small Entity.
- ☐ An extension fee in an amount of \$_____ for a _____-month extension of time under 37 C.F.R. § 1.136(a).
- ☐ A petition or processing fee in an amount of \$_____ under 37 C.F.R. § 1.17(_____).
- ☒ No additional filing fee is required as shown below:

					Small Entity			Not a Small Entity	
	Claims Remaining After Amendment		Highest No. Previously Paid For	Present Extra	Rate	Add'l Fee	or	Rate	Add'l Fee
Total		Minus			x \$9=			x \$18=	0
Indep.		Minus			x 43=			x \$86=	0
First Presentation of Multiple Dep. Claim					+\$145=			+\$290=	0
					Total	\$		Total	\$0

Fee payment:

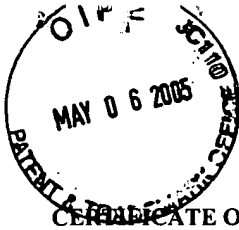
- ☐ A check in the amount of \$_____ to cover the above-identified fee(s) is enclosed.
- ☐ Please charge Deposit Account No. 23-1925 in the amount of \$_____. A copy of this Transmittal is enclosed for this purpose.
- ☐ Payment by credit card in the amount of \$_____ (Form PTO-2038 is attached).
- ☒ The Director is hereby authorized to charge payment of any additional filing fees required under 37 CFR § 1.16 and any patent application processing fees under 37 CFR § 1.17 associated with this paper (including any extension fee required to ensure that this paper is timely filed), or to credit any overpayment, to Deposit Account No. 23-1925.

Respectfully submitted,

Raymond W. Green (Reg. No. 24,587)

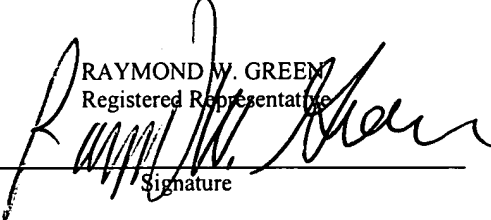
May 3, 2005

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RAYMOND W. GREEN
Registered Representative
Signature

Date of Signature: May 3, 2005

PATENT
Case 285/502

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:	Daniel J. Mattson et al.	:	
		:	
Serial No.:	09/558,386	:	
		:	
Filed:	April 25, 2000	:	Group Art Unit: 2632
		:	
For:	SYSTEM FOR DETECTING AND	:	Examiner: Davetta Woods Goins
	RELEASING A PERSON LOCKED	:	
	IN THE TRUNK OF A VEHICLE	:	

INFORMATION DISCLOSURE STATEMENT

Mail Stop Amendment
COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In conjunction with the examination of this Application, the Examiner is requested to consider the following information.

BACKGROUND

In this Application (filed April 25, 2000, and claiming priority of a provisional application filed April 26, 1999), on September 28, 2001, Applicants copied or substantially copied Claims 1-8, 10, 12 and 14-16 from Miller U.S. Patent 6,130,614, issued October 10, 2000, as Application Claims 31-43, respectively, for purpose of interference.

On November 21, 2001, the Examiner sent a letter stating that all claims were allowable, but that *ex parte* prosecution was suspended for six months, due to a potential interference.

On May 14, 2003, a non-final rejection of the Application was mailed, rejecting the claims on prior art references. The references applied by the Examiner were:

Federspiel, U.S. Patent 5,464,369, issued November 7, 1995;
Nesbitt, U.S. Patent 6,150,927, issued November 21, 2000 (filed March 30, 1998);
Gager, U.S. Patent 6,222,442, issued April 24, 2001 (filed March 29, 1999); and
Kim, PCT Publication WO 99/04119, published January 28, 1999.

On July 1, 2003, Applicants' undersigned attorney requested reexamination of Miller U.S. Patent 6,130,614, based on references applied by the Examiner in the May 14, 2003, Office Action of the present Application. The Reexamination proceeding was given Control No. 90/006,690, and reexamination was ordered on September 9, 2003. Reexamination has progressed, as discussed in greater detail below.

On November 14, 2003, Applicants filed an amendment, an IDS, three Declarations Under 37 CFR 1.131 (one by each of the three joint inventors), and a petition for an extension of time. In the Declarations, Applicants presented facts and documents to show conception and reduction to practice prior to January 28, 1999. Applicants thus asserted that the Gager and Kim references were antedated, and that all rejections based in whole or in part on Gager or Kim should be withdrawn. The Examiner was also advised of Reexamination No. 90/006,690, and it was pointed out that depending on the outcome of the Reexamination, an interference may be precluded or unnecessary. Applicants requested allowance of all claims, subject to a possible interference with Miller U.S. Patent 6,130,614, if it survived reexamination.

On February 12, 2004, a non-final rejection of the Application was mailed, rejecting the claims on prior art references. The Examiner did not mention the three Declarations Under 37 CFR 1.131 that had been filed on November 14, 2003. The references applied by the Examiner were:

Federspiel, U.S. Patent 5,464,369, issued November 7, 1995;
Nesbitt, U.S. Patent 6,150,927, issued November 21, 2000 (filed March 30, 1998);
Sonderegger, U.S. Patent 5,920,057, issued July, 1999; and
Gager, U.S. Patent "6,224,442", issue date and filing date not supplied.

A review of the February 12, 2004, Office Action revealed three irregularities: (1) Claim 15 was not rejected, although a discussion of Claim 15 *vis-à-vis* the applied art was present in Section 2 of the Office Action; (2) the applied U.S. Patent "6,224,442" was not issued to Gager and was not relevant; and (3) assuming that the Examiner had intended to apply Gager, U.S. Patent 6,222,442 in the Office Action, the rejections relying on Gager appeared to be improper, because in the Declarations Under 37 CFR 1.131, Applicants presented facts and documents to show conception and reduction to practice prior to January 28, 1999, and it appeared that the Gager reference had been antedated.

These circumstances were discussed in a series of telephone conversations, as described in the Request for Reconsideration filed May 14, 2004, at pages 3-6. Briefly, based on statements of Examiner Goins, it is understood that (1) the Examiner had intended to reject Claim 15 in Section 2 of the February 12, 2004, Office Action; (2) the Examiner had intended to apply Gager, U.S. Patent 6,222,442, previously of record; and (3) the Declarations Under 37 CFR 1.131 required further review.

On May 3, 2004, an examiner's Interview Summary was mailed, stating that "Either a Rejection or Notice of Allowance will be sent from the Examiner after full consideration of [the Declarations filed under 37 CFR] 1.131."

On May 14, 2004, Applicants filed a Request for Reconsideration of the Office Action of February 12, 2004. In the Request for Reconsideration, the following points were made:

- (1) All of the rejections in the February 12, 2004, Office Action rely on Gager, U.S. Patent 6,222,442.
- (2) In the Declarations Under 37 CFR 1.131, Applicants presented facts and documents to show conception and reduction to practice prior to January 28, 1999, so the Gager reference (filed March 29, 1999) has been antedated.
- (3) Gager should not be applied as a reference, and the rejections applying Gager should all be withdrawn.
- (4) If there are any shortcomings in the Declarations Under 37 CFR 1.131 filed in this Application, those shortcomings should be pointed out by the Examiner in a written communication to Applicants, at the earliest opportunity.
- (5) This Application still contains claims copied from Miller U.S. Patent 6,130,614 for purpose of Interference.

(6) Miller U.S. Patent 6,130,614 is still undergoing reexamination, and depending on the outcome of the reexamination, an interference may not be necessary; but

(7) Issuance of the present Application without some resolution of the interference question (*i.e.*, either an interference or a determination that no interference is necessary) is believed to be improper.

A review of the File History entries from the PAIR system for Serial No. 09/558,386 (the present Application) shows that:

(1) The Request for Reconsideration filed May 14, 2004, has been associated with the file for the Application, but apparently has not been formally entered or docketed to the Examiner in charge of Serial No. 09/558,386 (see entry "05-14-2004 / Workflow incoming amendment IFW").

(2) The Status of the Application is still listed as "Non Final Action Mailed" as of 02-12-2004.

(3) The Location of the Application is listed as "TC 2600 LEGAL INSTRUMENTS EXAMINER TEAM 3, PK 1-4E09" as of 06-10-2004.

(4) The following entries appear in the File History Contents:

"05-22-2004 / Miscellaneous Communication to Applicant – No Action Count"

"05-24-2004 / Mail Examiner Interview Summary (PTOL – 413)"

"05-24-2004 / Mail Miscellaneous Communication to Applicant".

(5) The three entries above in (4) are the only entries in the File History Contents dated after the entry "05-14-2004 / Workflow incoming amendment IFW".

From the three entries above in (4), one might conclude that an Examiner Interview Summary (PTOL – 413) and a Miscellaneous Communication to Applicant, apart from the examiner's Interview Summary mailed May 3, 2004, had been mailed on May 24, 2004. Accordingly, the undersigned attorney called Examiner Davetta Woods Goins on June 9, 2004, and asked if that were the case. Ms. Goins returned this phone call on the morning of June 10, 2004, and left a message that she had checked with her docket clerk, and gone over the status of all papers mailed out, and concluded that the last paper mailed out is the interview summary. The Examiner confirmed that the PTO has received the timely request for reconsideration and IDS filed May 11, which were the last papers added to the file. The Examiner stated that (1) the

entry "05-24-2004 / Mail Miscellaneous Communication to Applicant" was apparently just a redundant record that the May 3, 2004, interview summary was mailed, (2) nothing appeared to have been mailed since we filed our last response on May 11, 2004, and (3) the Examiner did not think there was anything in the PTO file that we did not have. The request for reconsideration had not (as of the time of the call) been formally entered by the docket clerk, but the Examiner stated that it was about to be entered, and when it is entered, the Examiner will be able to begin work on the case. The Examiner also stated that we should call her if we have any questions about the Application.

NEW INFORMATION

As noted above, reexamination of Miller U.S. Patent 6,130,614, in Reexamination No. 90/006,690, has progressed. After a Final Rejection on September 30, 2004, a Notice of Appeal and Appeal Brief were filed; and now on April 11, 2005, an Examiner's Answer was mailed to the Patent Owner and the undersigned, who is the Third Party Requester in the Reexamination. A copy of the Reexamination Examiner's Answer is enclosed for the information of the Examiner in this Application. Copies of other papers in the Reexamination¹ are available from the Image File Wrapper record of Reexamination No. 90/006,690.

MILLER'S ADMISSIONS

The Reexamination file indicates that (1) by offering substantial substantive amendments to all independent claims, Miller implicitly acknowledges that the originally patented Miller claims are not validly patentable to Miller over the prior art; and (2) Miller does not allege a date of invention prior to Gager's filing date, *i.e.*, Gager is admitted prior art to Miller.

PROGNOSIS

An interference between Miller and Applicants is still possible, but now appears highly unlikely. Applicants (claiming a provisional application priority of April 26, 1999) are more than 6 months senior to Miller (filed November 10, 1999, without priority).

¹ The Reply by Third Party Requester filed December 8, 2003, discusses several topics not addressed subsequently in the Reexamination file, such as that Miller's Amendment impermissibly adds new matter, that Miller's Amendment impermissibly adds matter not regarded by the Miller et al. inventors to be part of their invention, and that Miller's Amendment impermissibly broadens the claims.

If Miller U.S. Patent 6,130,614 is cancelled in its entirety in Reexamination No. 90/006,690, then the present Application may issue without an interference proceeding. The Miller surviving claims would not need to be analyzed, because there would be none.

At the other extreme, if Miller U.S. Patent 6,130,614 survives reexamination with all claims intact, the immediate declaration of an interference would be appropriate. That is highly unlikely, as Miller has already proposed significant amendments to all of the Miller claims (except those already cancelled). Even with those amendments, however, all of the amended Miller claims are finally rejected and appealed.

If Miller U.S. Patent 6,130,614 were to survive reexamination with amended claims, then the question would arise, "Do the surviving Miller claims interfere with Applicant's claims?"

With this state of affairs, waiting to see how Reexamination No. 90/006,690 turns out is understandable. However, with an Examiner's Answer now issued in Reexamination No. 90/006,690, the end of the Reexamination may be in sight.

It is now almost 18 months since Applicants filed Declarations Under 37 CFR 1.131 presenting facts and documents to show conception and reduction to practice prior to the effective dates of the Gager and Kim references, and there has not been a substantive response from the PTO with respect to those Declarations. Applicants respectfully submit that this is an unreasonable delay on the part of the PTO. For more than 10 months, the location of the Application has been listed on PAIR as "TC 2600 LEGAL INSTRUMENTS EXAMINER TEAM 3, PK 1-4E09" – presumably, so that the Declarations Under 37 CFR 1.131 can be examined in detail, and any shortcomings in the Declarations can be determined.

On April 25 and May 2, 2005, telephone conferences were initiated by the undersigned with Examiner Goins, the courtesy of which is noted with appreciation. Examiner Goins stated that she and her supervisor have not been able to locate the file for the present Application, but that it is apparently *not* with TC 2600 Legal Instruments Examiner Team 3.

ACTION REQUESTED

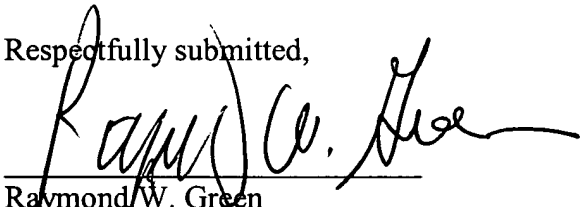
(1) Gager should not be applied as a reference, and the rejections applying Gager should all be withdrawn.

(2) If there are any shortcomings in the Declarations Under 37 CFR 1.131 filed in this Application, those shortcomings should be reported to Applicants, so that remedial action may be taken in a reasonable time. Further delay may make any needed remedial action more difficult.

(3) The references cited in the IDS filed May 14, 2004, should be reviewed and acknowledged.

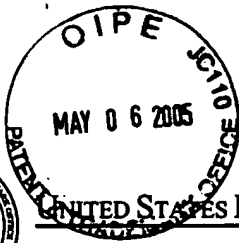
(4) If the Declarations Under 37 CFR 1.131 are accepted, then Applicants' claims should be indicated to be allowable, subject to an interference with Miller U.S. Patent 6,130,614, if it survives reexamination with claims that interfere with Applicant's claims.

Respectfully submitted,



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Registration No. 24,587

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P. O. Box 10395
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312-321-4222
May 3, 2005



UNITED STATES PATENT AND TRADEMARK OFFICE

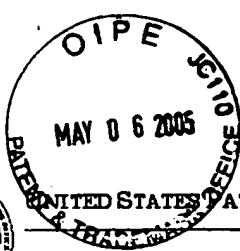
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
90/006,690	07/01/2003	6130614	MillerReex	9287
22844	7590	04/11/2005	EXAMINER	
FORD GLOBAL TECHNOLOGIES, LLC. SUITE 600 - PARKLANE TOWERS EAST ONE PARKLANE BLVD. DEARBORN, MI 48126			ART UNIT	PAPER NUMBER

DATE MAILED: 04/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

cc'd: Third Party Requester,
as attached



UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
United States Patent and Trademark Office
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(THIRD PARTY REQUESTER'S CORRESPONDENCE ADDRESS)

Raymond W. Green
Brinks Hofer Gilson & Lione
3600 NBC Tower
455 N. Cityfront Plaza Drive
Chicago, IL 60611-5599

EX PARTE REEXAMINATION COMMUNICATION TRANSMITTAL FORM

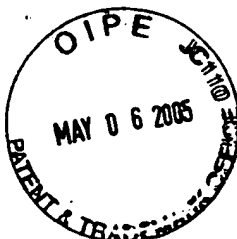
REEXAMINATION CONTROL NO. 90/006,690.

PATENT NO. 6130614.

ART UNIT 2600.

Enclosed is a copy of the latest communication from the United States Patent and Trademark Office in the above identified *ex parte* reexamination proceeding (37 CFR 1.550(e)).

Where this copy is supplied after the reply by requester, 37 CFR 1.535, or the time for filing a reply has passed, no submission on behalf of the *ex parte* reexamination requester will be acknowledged or considered (37 CFR 1.550(e)).



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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 90/006,690
Filing Date: July 01, 2003
Appellant(s): 6130614

John S. Le Roy
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed December 22, 2004.

(1) *Real Party in Interest*

A statement identifying the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

(3) Status of Claims

The statement of the status of the claims contained in the brief is correct.

(4) Status of Amendments After Final

No amendment after final has been filed.

(5) Summary of Invention

The summary of invention contained in the brief is correct.

(6) Issues

The appellant's statement of the issues in the brief is correct.

(7) Grouping of Claims

The rejection of claims 1-24 stand or fall together because appellant's brief does not include a statement that this grouping of claims does not stand or fall together and reasons in support thereof. See 37 CFR 1.192(c)(7).

(8) Claims Appealed

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) Prior Art of Record

6,222,442	Gager et al.	04-2001
5,464,369	Federspiel	11-1995

6,349,984	Marrazzo et al.	02-2002
5,856,646	Simon	01-1999

(10) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4 , 7, 8, 10-20, 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gager et al. (US 6,222,442) in view of Federspiel (US 5,464,369) and Marrazzo et al. (US 6,349,984).

Regarding claim 1: Gager discloses a detection system for use within a vehicle of the type having a trunk which is selectively movable between an open and a closed position, the detection system being adapted to detect the presence of a breathing individual (person) within the trunk. Gager does not disclose the claimed breathing detector which is disposed within the trunk, which is adapted to detect the breathing of the individual, and which generates a signal upon the detection of the breathing, or controller assembly which is communicatively coupled to the breathing detector, which receives the signal, and which opens the trunk upon receipt of the signal. However,

Gager discloses a vehicle system comprising a presence detector 40, located within the trunk, used to detect a person based on the person's movement. The presence detector 40 may be a motion sensor, or a heat sensor such as an infrared sensor, or a sonic sensor such as an ultrasonic sound sensor, or a combination of one or more sensors (col. 2, lines 43-64, especially lines 52-55). The Examiner states that Federspiel discloses a method of detecting carbon dioxide levels generated by persons within an enclosed space of a building (col. 4, lines 7-20). Federspiel also discloses that it is well known in the art to detect humans based on sound, infrared radiation, or vision (col. 2, lines 47-60). Since Gager discloses a device used to detect the presence of a person within the trunk of a vehicle, it would have been obvious to one of ordinary skill in the art to incorporate a breathing detector, as the carbon dioxide detection disclosed by Federspiel, with the system of Gager, to ensure that only a person is detected within the trunk and prevent a false alarm that may be given by the detection of any other object moving within the vehicle's trunk. Gager does not disclose an illuminated touch sensitive pad disposed in the trunk. Marrazzo et al. discloses an illuminated activator (20) for an internal vehicle trunk release mechanism. Although Marrazzo et al. does not disclose the activator is a sensitive pad; however, it is obvious that the activator button (20) of Marrazzo et al. is sensitive and requires little effort to release the trunk, since it is intended for a child. Since Gager and Marrazzo et al. discloses a device used to release the trunk of the vehicle, it would have been obvious to one of ordinary skill in the art to incorporate an illuminated actuator as taught by Marrazzo et al. in a system as

disclosed by Gager for providing an release mechanism that is easily perceived by the child in the enclosed dark trunk.

Regarding claim 2: Gager does not disclose the claimed carbon dioxide being emitted by the individual as the individual breathes and wherein the breathing detector detects the presence of the carbon dioxide within the trunk. However, Gager does disclose that the presence detector 40 may be a motion sensor, or a heat sensor such as an infrared sensor, or a sonic sensor such as an ultrasonic sound sensor, or a combination of one or more sensors (col. 2, lines 43-64). Federspiel discloses a method of detecting carbon dioxide level generated by persons within an enclosed space of a building (col. 4, lines 7-20). Federspiel also discloses that it is well known in the art to detect humans based on sound, infrared radiation, or vision (col. 2, lines 47-60). Since Gager discloses a device used to detect the presence of a person within the trunk of a vehicle; it would have been obvious to one of ordinary skill in the art to incorporate a method of detecting the presence of a respiring person, as the carbon dioxide detection disclosed by Federspiel, with the system of Gager, to ensure that only a person is detected within the trunk and prevent a false alarm that may be given by the detection of any other object within the vehicle's trunk.

Regarding claim 3: Gager discloses the claimed vehicle is of the further type including an ignition switch which may be selectively moved to a certain position and the controller assembly is coupled to the ignition switch, senses the placement of the ignition switch in the certain position, and causes the trunk to be opened only if the ignition switch is placed in the certain position. The presence detector 40 used to sense

a person within the trunk and enables the latch of the trunk only after the ignition is cycled during a key override 42 (col. 4, lines 42-63). Gager does not disclose the claimed trunk being opened in response to the signal from the breathing detector. However, he does disclose that the presence detector 40 may be a motion sensor, or a heat sensor such as an infrared sensor, or a sonic sensor such as an ultrasonic sound sensor, or a combination of one or more sensors (col. 2, lines 43-64). Federspiel discloses a method of detecting carbon dioxide levels generated by persons within an enclosed space of a building (col. 4, lines 7-20). Accordingly, Federspiel also discloses that it is well known in the art to detect humans based on sound, infrared radiation, or vision (col. 2, lines 47-60). Since Gager discloses a device used to detect the presence of a person within the trunk of a vehicle, it would have been obvious to one of ordinary skill in the art to incorporate a method of detecting the presence of a respiring individual, as the carbon dioxide detection disclosed by Federspiel, with the system of Gager, to ensure that only a person is detected within the trunk and prevent a false alarm that may be given by the detection of any other object moving within the vehicle's trunk.

Regarding claim 4: Gager discloses the claimed vehicle is of a type which is selectively driven and wherein the controller assembly prevents the trunk from being open when the vehicle is driven. The latch release 70 will open the trunk as long as the vehicle's engine is off or the vehicle is in "park" (col. 3, lines 18-39).

Regarding claim 7: Gager does not disclose the claimed breathing detector which measures the amount of carbon dioxide resident within the trunk, stores a certain value, compares the measured amount of carbon dioxide to the certain value, and

generates the signal only if the measured amount of the carbon dioxide is greater than the certain value. However, Gager does disclose that the presence detector 40 may be a motion sensor, or a heat sensor such as an infrared sensor, or a sonic sensor such as an ultrasonic sound sensor, or a combination of one or more sensors (col. 2, lines 43-64). Federspiel discloses a method of detecting carbon dioxide levels generated by persons within an enclosed space (col. 4, lines 7-20). He states that Federspiel discloses a method of detecting the level of carbon dioxide in an enclosed space, and that a sensor 22 is a non-dispersive infrared sensor that sends a signal representative of the concentration of carbon dioxide in a room 28 (col. 10, lines 26-50). The Examiner says that Federspiel also discloses that it is well known in the art to detect humans based on sound, infrared radiation, or vision (col. 2, lines 47-60). The values of measured carbon dioxide in Federspiel are determined over predefined time intervals. Once the rate at which carbon dioxide is being generated within the room 28 is greater than the predetermined threshold value, a CPU 38 sends a signal to a control unit 46 to cause the control unit 46 to activate an alarm 34 (col. 11, lines 5-51). Since Gager discloses a device used to detect the presence of a person within the trunk of a vehicle with infrared, the Examiner in the Pending Application has asserted that it would have been obvious to one of ordinary skill in the art to incorporate the process of comparing a measured amount of carbon dioxide to a certain stored value, as disclosed by Federspiel, with the system of Gager, to ensure that only persons are detected within the trunk and to prevent any false alarms from a level of carbon dioxide which fails to reach a threshold level.

Regarding claim 8: Gager discloses the claimed controller assembly, further including a timer which allows the detection system to be operable for a certain period of time, when motion is detected within the trunk during a time delay period before actuating the trunk lid release feature 90 (col. 4, lines 64-67 and col. 5, lines 1-8).

Regarding claim 10: Gager discloses that the claimed individual may be a child, thus, the presence detector 40 detects the presence of, for example, a child 12 (col. 2, lines 35-42).

Regarding claim 11: The use of cameras in security devices has been well known for many years.

Regarding claim 12: Gager does not disclose the claimed method of measuring an amount of carbon dioxide within the trunk of the vehicle, and using the measured amount of carbon dioxide to determine the presence of the child within the trunk of the vehicle. However, Gager does disclose that the presence detector 40 may be a motion sensor, or a heat sensor such as an infrared sensor, or a sonic sensor such as an ultrasonic sound sensor, or a combination of one or more sensors (col. 2, lines 43-64). Federspiel discloses a method of detecting carbon dioxide levels generated by persons within an enclosed space (col. 4, lines 7-20). He says that Federspiel also discloses that it is well known in the art to detect humans based on sound, infrared radiation, or vision (col. 2, lines 47-60). Since Gager discloses a device used to detect the presence of a person within the trunk of a vehicle, it would have been obvious to one of ordinary skill in the art to incorporate a method of detecting the presence of a respiring person, using the carbon dioxide detection system disclosed by Federspiel, with the system of Gager,

to ensure that only a person is detected within the trunk and prevent a false alarm that may be given by the detection of any other object within the vehicle's trunk.

Regarding claim 13: The use of voice detection modules in security devices is well known.

Regarding claim 14: Gager discloses detecting the presence of a child only when the vehicle is stationary. The Examiner says the presence detector 40 of Gager may automatically activate trunk compartment lid release 90 upon detection of person 12, such as when the engine of the vehicle is not running or when the vehicle is in "park" (col. 3, lines 18-59).

Regarding claims 15 and 16: Gager does not specifically disclose detecting "at least one bodily function of " an individual, including detecting the carbon dioxide exhaled by the individual in respiration. However, Gager does disclose that the presence detector 40 may be a motion sensor, or a heat sensor such as an infrared sensor, or a sonic sensor such as an ultrasonic sound sensor, or a combination of one or more sensors used to "detect a person" within the trunk (col. 2, lines 43-64).

Federspiel discloses a method of detecting carbon dioxide levels generated by persons within an enclosed space (col. 4, lines 7-20). He contends that a sensor 22 is a non-dispersive infrared sensor that sends a signal representative of the concentration of carbon dioxide in room 28 of Federspiel (col. 10, lines 26-50). Federspiel also discloses that it is well known in the art to detect humans based on sound, infrared radiation, or vision (col. 2, lines 47-60). Since Gager discloses a device used to detect the presence of a person within the trunk of a vehicle with an infrared sensor and Federspiel teaches

that it is well known in the art to use infrared sensors to detect humans, it would have been obvious to one of ordinary skill in the art to incorporate Federspiel's carbon dioxide sensor for detecting the presence of a respiring individual, with the system of Gager, to ensure that only a person is detected within the trunk and prevent a false alarm from some other object within the vehicle's trunk.

Regarding claim 17: Marrazzo et al. discloses the touch sensitive pad (20) includes light emitting members (32) cooperatively positioned to induce the individual to touch the illuminated touch sensitive pad (col. 3, lines 49-61).

Regarding claim 18: Marrazzo et al. discloses the touch sensitive pad includes an indicia (22) to induce the individual to touch the illuminated touch sensitive pad (col. 3, lines 9-23; Fig. 2).

Regarding claim 19: Marrazzo et al. discloses the touch sensitive pad (20) includes light emitting members (32) cooperatively positioned to induce the individual to touch the illuminated touch sensitive pad (col. 3, lines 49-61).

Regarding claim 20: Marrazzo et al. discloses the touch sensitive pad includes an indicia (22) to induce the individual to touch the illuminated touch sensitive pad (col. 3, lines 9-23; Fig. 2).

Regarding claim 22: Marrazzo et al. discloses the touch sensitive pad (20) includes light emitting members (32) cooperatively positioned to induce the individual to touch the illuminated touch sensitive pad (col. 3, lines 49-61).

Regarding claim 23: Marrazzo et al. discloses the touch sensitive pad includes an indicia (22) to induce the individual to touch the illuminated touch sensitive pad (col. 3, lines 9-23; Fig. 2).

Claims 9, 21 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gager et al. (US 6,222,442) in view of Federspiel (US 5,464,369) and Marrazzo et al. (US 6,349,984) as applied to claims 12 and 15 above, and further in view of Simon (US 5,856,646). Although the system of Gager et al. in view of Federspiel and Marrazzo et al. does not disclose the touch sensitive pad includes a capacitance sensor; thus, capacitance sensor is well known in the art and such sensitive touch pad with capacitance sensor is taught by Simon (col. 4, lines 39-50). At the time of the invention, it would have been obvious to one of ordinary skill in the art to utilize a capacitive sensor that is very effective in response to the human touch.

(11) Response to Argument

Appellant's Arguments:

1-The innovative feature of the "illuminated touch sensitive pad" is not taught or suggested by the Gager reference, or any of the other submitted prior art.

2-The Examiner has not identified any objective motivation to combine the references of Gager, Federspiel, Marrazzo and Simon with respect to the capacitance sensor.

Response to Arguments:

1-Gager does not disclose an illuminated touch sensitive pad disposed in the trunk. Marrazzo et al. disclosed as follows: "With the light provided by the illuminated activation button (20), a child (10) can see his/her surroundings and can readily move himself/herself close enough to the activation button (20) to touch the activation button ... as soon as the activation button (20) is contacted, the trunk latch solenoid is activated and the trunk (14) of the automobile opens" (col. 2, line 64-col. 3, line 9).

Although Marrazzo et al. does not disclose the activator is a sensitive pad; however, since it is intended for a child, it is obvious that the activator button (20) of Marrazzo et al. is sensitive and requires little effort to release the trunk. The activation button is **still** ,without doubt, sensitive to the touch of the child in the trunk. Since Gager and Marrazzo et al. disclose a device used to release the trunk of the vehicle, it would have been obvious to one of ordinary skill in the art to incorporate an illuminated actuator as taught by Marrazzo et al. in a system as disclosed by Gager for providing an release mechanism that is easily perceived and operate by the child in the enclosed dark trunk.

2-In the prior action, the Examiner has mistakenly relies on the Appellant's statement regarding the presence of capacitance detecting device in notebook computers to render this claim obvious. The rejection of claim 9 is intended to be grouped with the rejection of claims 21 and 24. Capacitive touch sensors for use as switches are well known in the art. The reference of Simon is combined to clearly show that a soft touch capacitive sensor is utilized to provide a touch sensitive activation button (col. 4, lines 39-50). Since Simon teaches a soft touch capacitive pad; it would

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have been obvious to one of ordinary skill in the art to utilize this well known device in the system as disclosed by Gager in view of Federspiel and Marrazzo to effectively and easily activate the switch by the child.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Toan Pham

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PRIMARY EXAMINER



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